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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/265,946	03/11/99	HUSSEINI	032391-002

AMTECH, INC.
BUILDING 9355
STENNIS SPACE CENTER, MS 38529-7099

PM82/1117

EXAMINER
SEMUNEGUS, L

ART UNIT	PAPER NUMBER
3641	

DATE MAILED: 11/17/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No.

09/265,946

Applicant(s)

HUSSEINI ET AL.

Examiner

Lulit Semunegus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-115 is/are pending in the application.
- 4a) Of the above claim(s) 3-4, 9, 19, 22, 26 and 35-113 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-8, 10-18, 20, 21, 23-25 and 27-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 20) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 1-2, 5-8, 10-18, 20-21, 23-25, 27-34 and 114-115 are considered. Claims 19 and 36 are not considered since applicant has elected the casing body being plastic and not combustible material according to paragraph 5 of the election requirement.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 6, 11-12, 20-21, 23, 28 and 114-115 are rejected under 35 U.S.C. 102(b) as being anticipated by Grelle et al (4,614,157). Grelle et al disclose a plastic cartridge casing body (14) having a first end (11) and a second end (12) and a projectile (10) attached to the first end (11) of the cartridge casing body (fig. 2 & 3), wherein the cartridge casing body (14) is molded around at least a portion of the projectile (col. 2, lines 6-16) and the cartridge casing body follows cannellure contours of the projectile with the wall having a substantially constant thickness (col. 2, lines 27-32), wherein the cartridge casing body (14) includes a first interior portion and a second interior portion, the second portion having a smaller diameter than the first portion and being separated from the first interior portion by the shoulder, the shoulder being of sufficient size to prevent axial movement of the projectile into the second interior portion (fig. 3) and a base attached to the second end (13) and the base is a molded plastic base (col.2, lines 14-15) and is mechanically attached (col. 1, lines 52-53).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13-18 and 29-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grelle et al (4,614,157) in view Dumortier (4,192,233). Grelle et al disclose all the limitations of claims 13-18 and 29-34 as applied to the claims 1-2, 6, 11, 12, 20-21, 23, 28 and 114-115 above, except the base is attached to the cartridge casing body by various methods of attachment. Dumortier teaches an ultrasonic welding (col. 2, line 29-31) method of attachment between a base (2) and a casing body (1) of a plastic cartridge (abstract). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to attach a base and casing body using ultrasonic welding as taught by Dumortier as well as screw threads, tongue and groove arrangement, interference fit, adhesive and heat bond since these methods of attachments are well known in the art.

6. Claims 5, 7-8 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grelle et al (4,614,157) in view of Bell (4,572,078). Grelle et al disclose all the limitations of claims 5, 7-8 and 24-25 as applied to the claims 1-2, 6, 11, 12, 20-21, 23, 28 and 114-115 above, except a flange on the cartridge casing body. Also Grelle et al do not expressly disclose a propellant charge inside the cartridge casing body. Bell teaches a cartridge ammunition that may be used with cases made of

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plastic (col. 1, lines 58-60) where the projectile (18) is attached to the cartridge casing body (12) by a flange (16) on the cartridge casing body extending into a recess in the projectile (col. 2, lines 27-29). Furthermore, Bell teaches a propellant charge (32) inside the cartridge casing body and a primer for igniting the propellant (34). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a flange to retain the projectile in place (col. 2, lines 28-29). It is also well known in the art to have a propellant charge in the primer as taught by Bell (col. 2, line 34).

7. Claims 10 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grelle et al (4,614,157) in view of Sabranski et al (4,928,598). Grelle et al disclose all the limitations of claims 10 and 27 as applied to the claims 1-2, 6, 11, 12, 20-21, 23, 28 and 114-115 above, except a replaceable base. Sabranski et al teaches that it is well known in the art to have a reusable base by teaching a plastic case projectile with a replaceable base (5, col. 2, lines 32-34).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Milbank (123,352) teaches a cartridge with first and second section and a projectile attached to the first end of the cartridge casing body, wherein the cartridge casing body is around at least a portion of the projectile (fig. 4).

Furthermore, European patent 0,131,863A2 teaches a plastic casing cartridge similar to applicant's disclosure (fig. 1-3).

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lulit Semunegus whose telephone number is (703) 306-5960. The examiner can normally be reached on Mon-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Jordan can be reached on (703) 306-4159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

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November 16, 2000

Lulit Semunegus
Examiner
Art Unit 3641



MICHAEL J. CARONE
SUPERVISORY PATENT EXAMINER